AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE	OF PAGES
N/A	1	27

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
0011	6 AUG 2004	N/A	

6. ISSUED BY	CODE	7. ADMINISTERED BY *(If other than Item 6)*	CODE
USACE SACRAMENTO DISTRICT ATTN: CONTRACTING DIVISION 1325 J STREET SACRAMENTO, CALIFORNIA 95814-2922		SEE ITEM 6	

8. NAME AND ADDRESS OF CONATRACTOR *(No., street, county, State and ZIP Code)*	(√)	9A. AMENDMENT OF SOLICITATION NO.
	X	W9123P7-04-B-0008
		9B. DATED *(SEE ITEM 11)* 28 JUN 2004
		10A. MODIFICATION OF CONTRACTS/ORDER NO. N/A
		10B. DATED *(SEE ITEM 13)* N/A
CODE / FACILITY CODE		

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☒ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☒ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(√)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor ☐ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

OAKLAND HARBOR NAVIGATION IMPROVEMENT - 50 FOOT DEEPENING PROJECT INNER AND OUTER HARBOR DREDGING PHASE 3B AND 3C ALAMEDA AND SAN FRANCISCO COUNTIES, CALIFORNIA

1 ENCL: 1) 02315 AND 02480.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*	
15B. CONTRACTOR/OFFEROR *(Signature of person authorized to sign)*	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY *(Signature of Contracting Officer)*	16C. DATE SIGNED

SECTION 02315
MIDDLE HARBOR ENHANCEMENT AREA (MHEA) FILL

PART 1 GENERAL

1.1 SCOPE.

The work under this Section consists of the provision of all labor, plant, equipment, supplies and materials necessary to place excavated or dredged sediments from the Oakland Harbor Outer and Inner Channels in the Middle Harbor Enhancement Area (MHEA) within the limits described herein and shown on the Plans.

1.2 PAYMENT.

No separate payment will be made for placement of dredged material in the MHEA as described in this section. Payment for placing fill material as described herein will be included in the applicable unit prices for dredging under Section 02480 DREDGING. Furthermore, no separate or direct payment will be made for any work covered under this section, including but not limited to the preparation and submission of reports and data, and all costs in connection therewith will be considered a subsidiary obligation of the Contractor.

1.3 SUBMITTALS.

As prescribed in Section 01305 SUBMITTAL PROCEDURES, Government approval is required for submittals with a "GA" designation. "FIO" submittals are for information only and do not require government approval.

1.3.1 MHEA Fill Plan, and Updates – GA.

The Contractor shall submit an MHEA Fill Plan, coordinated with the Dredging Plan of Section 02480, to the Contracting Officer for approval at least ten (10) days prior to start of dredging. When directed by the Government, the Contractor shall update the plan and submit it within 3 days **of the Government's request** for approval. The plan shall contain the following:

a. Layout of all pipelines in the dredging and fill area.
b. Layout of all buoys, anchors and pipelines.
c. Proposed equipment and method of placing material to minimize the creation of mud waves, including methods to protect areas previously filled to grade from additional incidental filling.

d. Approximate schedule including interface with rock jetty and sheet pile construction (Middle Harbor Containment Structure), maintenance dredging and MHEA placement events, and order and sequencing of work, including fill placement elements. This part of the MHEA Fill Plan shall be submitted as an AutoCAD drawing in print and in electronic (dwg and pdf) form on a CD-ROM. The drawing shall contain the MHEA data and show the areas filled, over time, and the areas to be filled in the next week(s).
e. Quality Control Operations including, but not limited to, surveys and monitoring during construction.
f. Layout and shop drawings of all turbidity curtains, floating absorptive booms, and debris booms.
g. Means and methods for meeting water quality objectives per the Regional Water Quality Control Board waste discharge permit.

1.3.2 MHEA Fill Report – FIO.

The Contractor shall prepare and maintain an MHEA Fill Report for each of the grid cells using the form following this Section. The reports shall document dredging material locations and fill placement operations. The Contractor shall attach to the report for each cell a drawing which shows the location of each scow dump or pipe discharge point within the cell, the date, the starting and ending times of deposition of dredged material for each discharge/dump area and a list of the designated cells and channel stationing that were the source of the dredged material discharged at each discharge area. Forms shall be filled out completely and legibly and shall be maintained on site. The Contractor shall attach a copy of the current report for each cell that received sediment to the daily CQC Report.

PART 2 PRODUCTS. Not Used

PART 3 EXECUTION

3.1 GENERAL – Not Applicable

3.1.1 Avoidance of Existing and New Construction

It shall be the Contractor's responsibility to avoid damage to improvements made under this Contract or any other improvement existing at or near the Port of Oakland. The Contractor shall conduct MHEA fill operations in such a manner to prevent undermining or endangerment of any existing or new structures, including any structures under construction at the time of the contract. In particular, the Contractor shall exercise

extreme caution in the vicinity of the Middle Harbor Containment Structure. This structure consists of a central sheet pile wall and submerged rock jetties on west and east ends of the sheet pile wall.

3.2 EQUIPMENT. Turbidity Curtains. To reduce turbidity plumes, the Contractor shall use and maintain turbidity curtains, as needed**, to comply with all contract statutory and regulatory requirements**, at the placement sites to control release of fine-grained material into the bay during material placement operations. The Contractor shall meet RWQCB turbidity requirements for all types of placement.

3.3 PLACEMENT OF DREDGED MATERIAL INTO THE MHEA

3.3.1 Discharge Requirements

The Contractor shall be solely responsible for all discharges into the MHEA site **that** are subject to the water quality requirements of the Regional Water Quality Control Board (RWQCB) Order No. 00-110 **and any subsequent amendments thereto**. The Contractor shall provide all methods, materials and equipment necessary to maintain water quality in accordance with the requirements of the Regional Water Quality Control Board Order. Such means and methods may include and shall not be limited to installing turbidity curtains, moving hydraulic pipeline discharge outlets in order to minimize the effects of tidal cycles carrying turbid water from the project site, etc. The Contractor shall shut down operations that do not comply with the RWQCB requirements until the Contractor has applied, built or instituted sufficient protective measures at the Contractor's expense, as required to comply with the RWQCB Order.

3.3.2 Hydraulic Discharge

When placing material directly into the MHEA by pipeline discharge, a manned discharge barge with positioning capability shall provide control of discharge location. The barge shall be capable of being maneuvered to any location in the discharge area, shall contain a vertical variable depth discharge pipeline capable of reaching within five feet of the maximum site depth and shall be equipped with a suitable diffuser plate. The variable depth discharge pipe shall be capable of reducing the velocity of discharged material by 80 percent compared to the velocity in the discharge line leaving the dredge.

3.3.3 MHEA Control Grid

A material placement control grid has been established for the MHEA, which consists of forty-three grid cells measuring 500 feet x 500 feet. Refer to the project plans for location and grid cell designations and physical coordinates. The placement of bottom dump material within a given cell shall begin in the eastern most portion of the cell and proceed to the west to produce an equal distribution of material within a given cell. The

placement of hydraulic discharge material within a given cell shall begin in the western most portion of the cell and proceed to the east.

3.3.3.1 Fill Progress Reporting

The Contractor shall document progress of fill placement by completing the MHEA Fill Report, including the "Remaining Cell Volume" column. The 1st entry in this column would be the "Minimum Placement Quantity" for the cell minus the "Load Bin Count" for the 1st deposit session, which could be a scow dump or a period of hydraulic discharge. The 2nd entry in this column would be the 1st entry minus the "Load Bin Count" for the 2nd deposit session. When the value in this column gets to zero, the Contractor shall stop depositing sediment into this grid cell.

3.3.4 Placement Lifts

The Contractor shall place material into the MHEA in three lifts, which have been established to raise the elevation of the MHEA taking into account the sediment flow patterns caused by the placed material and by construction of the Containment Structure (CS). In general, access into the MHEA shall be limited to the "western entrance" at grid cell number 15 unless otherwise directed by the Contracting Officer. For scheduling equipment to be used for sediment delivery, the Contractor shall take into account changes to MHEA accessibility caused by the rising elevations and the height of the submerged rock jetty in the vicinity of cell 15.

3.3.5 MHEA Lift Number 1

For the first lift, placement of dredged material into the MHEA shall into the grid cells listed in Table 02315-1. The final lift elevation for all of the cells listed shall be -20 feet MLLW.

TABLE 02315-1

MHEA Grid Cell #	Bottom Dump Sequence	Hydraulic Discharge Sequence
1	1	10
2	2	11
3	3	12
4	4	13
7	29	33
8	28	1
9	24	5
10	20	9
11	19	14
12	12	15
13	5	16
14	6	17
17	35	34
18	33	2
19	26	6
20	22	18
21	19	19
22	14	20
23	7	21
25	34	35
26	32	3
27	27	7
28	23	22
29	18	23
30	15	24
31	8	25
33	31	4
34	28	8
35	24	26
36	17	27
37	16	28
38	9	29
41	12	32
42	11	31
43	10	30

3.3.5.2 Lift Number 1 Placement Sequence

Clamshell dredged material shall be placed following the sequence in the "Bottom Dumping Sequence" column of Table 02315-1. Hydraulic dredged material shall be placed following the sequence in the "Hydraulic Discharge Sequence" column of Table 02315-1. Material shall first be placed into the grid cell with the number 1 in the appropriate "Sequence" column of Table 02315-1. When the "Remaining Cell Volume" column of the MHEA Fill Report for this grid cell reaches zero, the Contractor shall start filling the grid cell with the number 2 in the appropriate "Sequence" column.

3.3.5.3 Lift Number 1 Criteria for Fill Placement

The final fill elevation for Lift 1 shall be -20 feet MLLW for all grid cells. The Contractor shall distribute fill material throughout the MHEA by depositing sediment into the grid cells as described in paragraph 3.3.5.2. The Contractor shall also distribute the fill material within the individual cells, minimizing mounding and depressions. The Contractor shall control mounding so that the sediment in each grid cell does not exceed the final placement elevation of -20 feet MLLW.

3.3.6 MHEA Lift Number 2

For the second lift, placement of dredged material into the MHEA shall be into the grid cells listed in Table 02315-1. The final fill elevation for Lift Number 2 is -10 feet MLLW. This applies to all of the grid cells listed in Table 02315-1.

3.3.6.1 Lift Number 2 Placement Sequence

Clamshell dredged material shall be placed following the sequence in the "Bottom Dumping Sequence" column of Table 02315-1. Hydraulic dredged material shall be placed following the sequence in the "Hydraulic Discharge Sequence" column of Table 02315-1. Material shall first be placed into the grid cell with the number 1 in the appropriate "Sequence" column of Table 02315-1. When the "Remaining Cell Volume" column of the MHEA Fill Report for this grid cell reaches zero, the Contractor shall start filling the grid cell with the number 2 in the appropriate "Sequence" column.

3.3.6.2 Lift Number 2 Criteria for Fill Placement

The Contractor shall distribute fill material throughout the MHEA by depositing sediment into the grid cells as described in paragraph 3.3.6.1. The Contractor shall also distribute the fill material within the individual cells, minimizing mounding and depressions. The Contractor shall control mounding so that the sediment in each grid cell is no higher than the Final Fill Elevation of -10 feet MLLW.

3.3.7 MHEA Lift Number 3

For the third lift, placement of dredged material into the MHEA shall be limited to the grid cells listed in Table 02315-2. The final fill elevation for Lift Number 3 shall be as listed in Table 02315-2.

TABLE 02315-2

MHEA Grid Cell #	Lift 3 Final Placement Elevation (ft, MLLW)
1, 2, 3, 4, 7, 8, 9, 10, 11, 12, 13, 14, 19, 20, 21, 22, 23, 28, 29, 30, 31, 36, 37, 38, 41, 42, 43	0
17, 18, 25, 26, 27, 33	-4
34, 35	-6

3.3.7.1 Lift Number 3 Placement Sequence

Placement of Lift 3 shall be limited to hydraulic discharge placement. Hydraulic dredged material shall be placed following the sequence in the "Hydraulic Discharge Sequence" column of Table 02315-1. Material shall first be placed into the grid cell with the number 1 in the appropriate "Sequence" column of Table 02315-1. When the "Remaining Cell Volume" column of the MHEA Fill Report for this grid cell reaches zero, the Contractor shall start filling the grid cell with the number 2 in the appropriate "Sequence" column.

3.3.7.2 Lift Number 3 Criteria for Fill Placement

The Contractor shall distribute fill material throughout the MHEA by depositing sediment into the grid cells as described in paragraph 3.3.7.1. The Contractor shall also distribute the fill material within the individual cells, minimizing mounding and depressions. The Contractor shall control mounding so that the sediment in each grid cell is no higher than the Final Placement Elevations shown in Table 02315-2.

3.3.8 Incidental Fill

Material sloughing into grid cells 6, 16, and 24 at a 10H:1V slope from filling adjacent grid cells will be allowed, providing such fill is not excessive as determined by the Government.

3.3.8.1 Fill Placement Restriction

In no case shall the Contractor place material into grid cells 5, 6, 15, 16, or 24 at anytime during this contract unless specifically directed by the Contracting Officer. Only incidental fill from adjoining cells as described in Paragraph 3.3.8 is allowed in these cells.

3.3.9 Elevation Tolerances

The elevation for points within 200 feet of the center of a grid cell should be at or below the Final Placement Elevation for the grid cell for each respective fill lift. The elevation of the placed material shall be no higher than 1 foot above the Final Placement Elevations for each lift.

3.3.9.1 Documenting MHEA Elevations

Prior to placement of material into the MHEA, the Contractor shall survey the MHEA to determine existing bathymetry. The Contractor shall survey the MHEA after the completion of each placement lifts, prior to commencing with the succeeding lift. The Contractor shall survey the MHEA using the line files provided by the Government and the procedures of Section 01330. The Contractor shall include print outs of the bathymetric plots, with the grid cell boundaries overlaid, and an electronic copy, in dwg and pdf format, on a CD-ROM with the CQC Report.

3.3.9.2 Redistribution of Material

The Contractor shall dredge or retrieve any fill material that is higher than 1 foot above the Final Placement Elevations and shall redistribute the fill material to areas of the grid cells that have areas below the Final Placement Elevations for each lift. When the redistribution is complete, the Contractor shall resurvey the MHEA in accordance with Para 3.3.9.1.

3.4 Payment Request Documentation

In addition to the supporting documentation described in paragraph 9.4 of Section 02480, payment requests shall include print outs and an electronic copy on a CD-ROM of the MHEA bathymetric plots, with the grid cell boundaries overlaid, showing that the sediment elevations are no higher than 1 foot above the Final Placement Elevations. The Contracting Officer will not process the payment requests until all of the data has been received, reviewed and found to be in good order.

-- END OF SECTION --

Middle Harbor Enhancement Area (MHEA) Fill Report

MHEA Fill Report
Cell Number
:_____

			MHEA Fill Information																
									Material Type										
Date	Load Number	Available Cell Volume (CY)	Scow Name or Discharge Duration*	Contractor Tracking Number or Letter	Time of Discharge	X Easting	Y Northing	Load Bin Count or Estimated Discharge Volume* (CY)	San Antonio Formation	Old Bay Mud	Young Bay Mud	Rock	Fine-grained Sediments	Ratio of Load Bin Count to In-place Volume**	Estimated Load In Situ Volume Dredged** (CY)	Estimated Load Bulking Factor**	Estimated Load Volume Occupied** (CY)	Remaining Cell Volume (CY)	Remarks

*Clamshell or Hydraulic, as appropriate ** To Be Completed by the Government

SECTION 02480

DREDGING

1. WORK COVERED BY CONTRACT PRICES. The contract price per cubic yard for dredging shall include the cost of removal, transportation, processing and delivery of material as specified herein or indicated on the drawings.

1.2. MOBILIZATION AND DEMOBILIZATION.

1.2.1 Mobilization shall consist of all work required in preparing the Contractor's dredging plant and equipment for shipment; moving plant, equipment, labor, materials, supplies and incidentals to the job site; making ready for dredging; and maintaining plant and equipment in working condition at the site during the dredging period.

1.2.2 Demobilization shall consist of all work required to prepare plant and equipment for return trip and to remove all plant, equipment, labor and unused supplies and incidentals from the job site at the completion of the contract work, including cleaning up any land based staging site used in the prosecution of the work.

1.3. DREDGING

1.3.1 The estimated total quantities for dredging, including standard and allowable over depth, are summarized by Reach in Table 02480-1. The abbreviation for Wetland Non Cover Materials is WNC and for Wetland Cover Materials is WC. The Inner Harbor Reaches 10, 11 and 12 as shown in Table 02480-1 are optional dredging Reaches and will be shown combined as one optional item in the bidding schedule.

Reach #	Included Cells	Standard Dredging	Over depth Dredging	Estimated Quantity (CY)
1	09A, 10, 11, 12, 13 and 14	208,000	100,000	308,000
2	08, 09 and 16A	362,000	118,000	480,000
3	05, 06 and 07	255,000	74,000	329,000
4	03, 04 and 15A	147,000	46,000	193,000
5	01A and 02A	137,000	46,000	183,000
6	50, 51, 52 and 53	171,000	53,000	224,000
7	54, 55, 56, 57, 58 and 59	440,000	115,000	555,000
8	60, 61 and 6061W	375,000	89,000	464,000
9	62, 63 and 64	395,000	123,000	518,000
10	**65, 66 and 67**	**222,000**	**92,000**	**314,000**
11	**85, 86, 87 and 88**	**120,000**	**55,000**	**175,000**
12	**68**	**130,000**	**47,000**	**177,000**
Total	All Cells			3,920,000

Table 02480-1

1.3.2 The Contractor shall dredge WC material to -46 feet MLLW in the Cells shown on the plans with up to 1 foot of allowable over depth to ensure a channel depth of -46 feet is achieved. The side slopes shall be as shown in the plans with no allowance for over depth. The Contractor shall not dredge where there is no material above the -46 foot

template in the pre-dredge survey, i.e., there is no allowable over depth dredging where there is no pre-dredge material above the –46 foot template.

1.3.3 The Contractor shall deliver 1,320,000 CY estimated quantitiy of dredged material, shown in Bid Items 0001AB and 0001AC to the Montezuma Wetlands Project (MWP) disposal site. 1.3.3.1 Except for the WNC material, the Contractor in conjunction with Montezuma shall select the source of the material to be delivered to the MWP disposal site and shall provide proof of delivery as described in paragraph 5.5.1.1.2.

1.3.3.2 The Contractor shall dredge WNC material in cell 15A and 16A, with an environmental bucket to – 25 feet MLLW, with 1 ft allowable over depth. The slopes shall be 3 horizontal to 1 vertical and shall be dredged as a stepped slope until reaching daylight at the north ends of Cells 15A and 16A. The estimated quantity of WNC material is given in Table 02480-2.

Cells with WNC	Estimated WNC Quantity
15A	9,000 CY
16A	62,000 CY
Total WNC	71,000 CY

Table 02480-2

1.3.3.2.1 The Contractor shall dredge the north side (green toe) of Cells 03 and 04 to uncover the WNC material in Cell 15A and the north side (green toe) of Cells 08 and 09 to uncover the WNC material in Cell 16A. The Contractor shall account for the WNC material delivered to the MWP disposal site as part of the proof of delivery described in paragraph 5.5.1.1.2.

1.3.4 The Contractor shall deliver the rest of the WC material (an estimated 1,934,000 CY of WC from the Outer and Inner Harbors) to the Middle Harbor Enhancement Area (MHEA). The Contractor shall not dispose of any WNC material in the MHEA.

1.3.5 If the option for Reaches 10, 11 and 12 is exercised, the Contractor shall deliver all of the material (an estimated 666,000 CY of WC) to the MHEA. The Contractor shall not dispose of any WNC material in the MHEA.

1.3.6 The Contractor shall deliver debris to a Certified Land Disposal site. The Contractor's unit price shall include, but not be limited to, separation, transportation and delivery fees for the debris. The estimated quantity of debris is 40 tons.

2. VARIATION OF QUANTITIES

2.1 Equitable adjustments for variations in estimated quantities will be based on EFARS 52.211-5001 VARIATIONS IN ESTIMATED QUANTITIES - SUBDIVIDED ITEMS and EFARS 52.2900-4021 VARIATIONS IN ESTIMATED QUANTITIES – DREDGING AND FAR 52.211-18 VARIATION IN ESTIMATED QUANTITY.

2.2 The Contractor may propose an adjustment to the unit price, under the variations clause and when the actual quantity of material within the required dredging prism is less

than 85% of the estimated quantities. This applies to three individual items: Item 0001AB-A, Item 0001AC-A, Item 0001AD-A and Item 0003AA-A, if the option is exercised. It also applies to the sum of Items 0001AC-A and 0001AD-A since the source material is commingled

3. SUBMITTALS. As prescribed in Section 01305 SUBMITTAL PROCEDURES, Government approval is required for submittals with a "G" designation. All submittals not designated with the letter (G) do not require Government approval and will be for information only.

3.1 The Contractor shall submit the following items at least ten (10) days prior to the start of dredging.

Dredging Plant and Equipment (Para 5.1.5) – G
Dredging Plan (Para 5.5.1) – G.
Coast Guard Notification (Para 5.6.1)
Debris Plan (Para 5.7.1) – G.
DDLS (Para 7.2) – G.

3.2 The Contractor shall submit the following items weekly.

Dredging Plan Updates (Para 5.5.1) – G.
Dredge Material Disposal Site Log (Para 7.4)

3.3 The Contractor shall submit the following items, as required.

Proof of Delivery Method – Montezuma (Para 5.5.1.1.2) – G
Survey Plan for Outside of the Project Limits (Para 5.9)
Testing Lab Qualifications and Recommended Procedures (Para 6.2.2.1) – G

3.4 The Contractor shall submit the following items with other required submissions, when appropriate.

Items to be submitted with the daily CQC Report:

Dredged Sediment Report (Para 7.1)
DDLS Reports/Data (Paras 7.2.1 and 7.2.2)
Landfill Testing Reports (Para 6.2.2.3)

4. SITE CONDITIONS.

4.1 Character of Materials

4.1.1 Materials to be dredged are; recently shoaled material consisting of soft to very soft silty clay and loose sands, and unclassified new work material consisting of Young Bay Mud (YBM), Old Bay Mud (OBM) and San Antonio Formation (SAF). Additional information can be found in Appendix 19.

4.1.2 Wetland Cover (WC) material is considered to be suitable for unconfined aquatic fill. Wetland Non-Cover (WNC) material is considered to be unsuitable for unconfined

aquatic fill.

4.2 In accordance with Contract Clause "SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK (FAR 52.236-0003)" the Contractor is expected to examine the site of the work. The records of previous dredging are available at the office of the District Commander, U. S. Army Corps of Engineers, 333 Market Street, San Francisco, California 94105.

5. DREDGING.

5.1 Equipment. The Contractor's plant and equipment to be used in performing the work shall be of sufficient size and efficiency to meet the job requirements.

5.1.1 Dredging shall be performed by electric clamshell dredge(s) and/or electric hydraulic dredge(s). Booster pumps for the hydraulic dredge, if used, shall be electrically powered. The Dredging Contractor shall arrange with the power source owner/provider which equipment is needed to connect to the power sources and for the utility connection and consumption fees. All utility related fees shall be borne by the Contractor. The Dredging Contractor is responsible for all work necessary to connect, maintain and after the dredging work is completed removal of the connection equipment and bringing the power source to an as was condition before the connection was made.
Available Dredge Power sources at the Port of Oakland are:

Power	Power Source Owner	Voltage

Location		
Berth 59	Port of Oakland	12.47 kV
Berth 26	Port of Oakland	12.47 kV
Pier 7	PG&E	12.47 kV
Berth 38	Port of Oakland	4.16kV
Alameda	Alameda Power and Telecom	12.47kV

5.1.2 Other equipment, such as, tugboats and survey vessels, may be diesel powered.

5.1.3 The Contractor shall coordinate with the contractor for the Montezuma Wetlands Project (MWP) disposal site – the Montezuma operator – to ensure that the type of barge or scow used for dredge material transport is compatible with the off-loader. Point of contact for information is Montezuma LLC, Managing Partner, Mr. Jim Levine, 510-596-9501.

5.1.4 Clamshell dredging of the WNC material shall be performed using an approved environmental bucket.

5.1.5 The Contractor shall submit a description of the dredging plant(s) and equipment to be used on this job, including the environmental bucket, for approval by the Contracting Officer or a properly designated Contracting Officer's Representative (COR) at least 10 days prior to the start of dredging.

5.2 Performance Period. The performance period – the start of mobilization, dredging and the electrical installation work and the completion of the dredging and clean up – is specified in paragraph 3 of Section 01005. The Contractor shall commence dredging and electrical installation work 20 days after NTP.

5.2.1 The Contractor shall dredge and transport sediments from the Outer Harbor, Reaches 1 through 5, to the MWP disposal site and the MHEA , if directed. The dredging work for the Outer harbor shall be completed by, January 31, 2005.

5.2.2 The Contractor shall dredge and transport sediments from the Inner Harbor, Reaches 6 through 9, to the MWP disposal site and/or the MHEA. All dredging work for the Inner Harbor shall be completed by **June 30, 2005.**

5.2.3 If the option is exercised, the Contractor shall dredge and transport sediments from the Inner Harbor, Reaches 10 through 12, to the MWP disposal site and/or the MHEA. All dredging work for the Inner Harbor shall be completed by **June 30, 2005.** No additional time will be granted if the contractor receives option notification 90 days prior to, **30 June 2005.** If the option is exercised later, the Government will refer to the contractors dredging plan schedule to determine if additional days are warranted.

5.3 Electric Power. The Contractor shall use commercial electricity to power the dredge(s) and booster pump(s).

5.3.1 The Contractor shall arrange for electrical service from the power company, furnish and install the meter housing, meters, connections, cables and any other facilities required to bring the power to the dredge(s) and pump(s). These costs and the cost of the power consumption for dredging and other work shall be borne by the Contractor, in accordance with Special Clause 52.0236-4584 CONTRACTOR-PROVIDED UTILITIES.

5.3.2 The Electrical Installation Work will provide a substation capable of supplying power from Oakland to electric dredges and booster pumps working in the Outer Harbor. The Contractor may use this facility as soon as construction is complete with the Contracting Officer's approval.
At the Inner Harbor the Power will be provided by the substation at Berth 59..
If the new and other existing electrical installations are used by the Contractor, when the dredging is completed, the Contractor shall repair or replace any equipment or facilities damaged during dredging operations and shall restore the facilities to conditions acceptable to the Contracting Officer, in accordance with Special Clause 52.236-7 PERMITS AND RESPONSIBILITIES.

5.3.3 Pipelines and Cables. The Contractor shall obtain permits and approvals for constructing or installing pipelines and cables and shall bear all of the risk and costs for maintenance and protection of pipelines and cables. The Contractor shall keep pipelines and cables in good condition at all times, and any leaks or breaks along their length shall be promptly and properly repaired. Contractor shall include all costs of pipelines and cables in the unit prices for dredging. There will be no additional compensation for pipelines and cables.

5.3.4 Floating and land-based pipelines and cables shall be visible for public safety by marking the pipeline/cable by installing warning signs or buoys and will be illuminated at night by a series of lights along the entire alignment of the pipeline/cable. Lights shall be spaced not greater than 100 feet apart, or as approved by the Contracting Officer.

5.3.5 The channels to be dredged are near major ship lanes serving the Port of Oakland and these ship lanes cannot, under any circumstances, be blocked by floating dredge discharge pipes or electric cables. All pipelines/cables, which would cross, block or impede navigation, or create a hazard, shall be trenched and installed in the channel bottom below the currently maintained depth. All power cables and sediment pipelines shall be deployed in such manner that they will rest on the channel bottom during dredging and non-dredging periods for the entire project duration. Submerged pipelines/cables located within navigation limits shall not extend above posted navigation depths. All pipelines and cables shall be kept out of all the active berth areas at the Port of Oakland, and other active work areas (e.g., in the area of the containment structure at the MHEA)

5.3.5.1 Anchoring Discharge Lines. The Contractor shall anchor all discharge lines in a manner that will prevent damage to maritime vessels. The Contractor shall include an "anchoring plan" in the Dredging Plan.

5.3.5.2 After the review and finalization of the Dredging Plan, the Contractor shall perform a pre-dredge hydrographic survey of the pipe alignment. The following survey

procedures shall apply:

a. Cross-sections shall proceed along centerline at 100' (30.5 m) intervals and extend 100' (30.5 m) each side of the pipe centerline;
b. Cross-sections and soundings shall be plotted at 1"=100' (30.5 m). Thereafter, surveys shall be performed once each month for the life of the contract and shall be submitted with the daily CQC Report within 2 days of performing the survey. If any survey reflects mounding caused by leakage from the discharge line, the Contractor shall immediately remove the mound materials and dispose of them at the disposal site. If the Contractor elects to place the discharge line within the project dredging limits, both top of anchors and top of discharge line shall be below project standard depth. If alignment of the discharge line is outside the project dredge limits, the Contractor shall visually mark pipe and anchors as required for safety of all users of the area.

5.3.6 The Contractor shall control the tension in the cables or pipelines to prevent them from floating to the surface and hindering marine traffic or terminal operations. The Contractor shall provide an additional safety inspector for the duration of the dredging process to monitor all power cables for the clamshell dredge, as well as all power cables and sediment pipelines used for the hydraulic dredge, if used.

5.4 Coordination. The Contractor shall coordinate his/her activities in such a way as to not interfere with other activities in the Port of Oakland.

5.4.1 There will be a contractor constructing the MHEA containment structure and other contractors disposing of dredged material in the Middle Harbor, including but not limited to, the Port of Oakland berth deepening projects and the Government's Inner Harbor Turning Basin dredging. The Contractor shall coordinate with all other contractors to ensure smooth operating conditions for all MHEA users in accordance with Special Clause 52.236-8 OTHER CONTRACTS.

5.4.2 The Contractor shall schedule dredging operations so as to avoid any interference with marine traffic or terminal operations.

5.4.3 Inherent Delays. The Contractor shall anticipate inherent delays for dredging around obstructions, including but not limited to, cables and moored vessels, and for accommodating marine traffic. Such delays will not be the basis for a contract extension or for an increase in the unit prices for dredged material.

5.4.4 Existing and New Construction. The Contractor shall avoid damage to improvements made under this Contract or any other improvement existing at or near the Port of Oakland. The Contractor shall conduct dredging and fill operations in such a manner to prevent undermining or endangerment of any existing or new structures, including any structures under construction at the time of the contract users in accordance with Special Clause 52.236-9.

5.5 Dredging. The dredging comprises removal of sediments at the Inner and Outer Harbors at the Port of Oakland.

5.5.1 Dredging Plan. Prior to any dredging work, the Contractor shall submit a Dredging Plan for review and comment. This Dredging Plan shall be coordinated with

the Project Schedule of Section 01320, the MHEA Fill Plan of Section 02315 and shall include a time schedule showing the anticipated start and end of dredging of all the cells or reaches and the hydrographic surveying activities. Dredging shall not commence until the Dredging Plan has been approved by the Contracting Officer. The Contractor shall update the data on a weekly basis and shall submit a copy of the updated Dredging Plan to the Contracting Officer for approval.

5.5.1.1 The plan shall show barge anchoring locations, instrumentation used, coordinates and land elevations of all control points for electronic positioning system and MLLW determination, estimated daily dredge advances, quality control survey procedures, anticipated problem areas of project involving poor access due to boat traffic congestion or boat docking, and procedures to assure that dredging will proceed within the contract template and be performed in the most economical manner.

5.5.1.1.1 The Contractor, in conjunction with the Montezuma operator and as part of the Contractor's development of the Dredging Plan, shall determine the source areas of WC material to be delivered to the MWP, the production weeks and production days within the weeks and the sequence of the dredging and delivery of WC and WNC material to the MWP that takes into account, as a minimum, the WNC settling and covering requirements. .

5.5.1.1.2 The Contractor shall provide "proof of delivery" for all material delivered to the MWP disposal site. Proof of delivery could be demonstrated by performing a QC survey prior to the start of dredging for each type of material to establish the in-place quantities, tracking all sediment removed to its designated location using DDLS and performing a QC survey after the minimum quantities have been delivered to calculate the quantity removed. The Contractor shall propose a "proof of delivery" method for Contracting Officer approval prior to start of dredging any material to be delivered to the MWP. The proof of delivery method shall account for possible suspension of deliveries to the MWP. . To maintain dredging progress sufficient to meet the deadlines in paragraph 5.2, a suspension of deliveries to the MWP may require delivering material to the MHEA during the suspension. The proof of delivery method must keep meticulous track of material to be delivered to the MWP. The Contractor can obtain the current and projected Montezuma storage cell capacities from Mr. Jim Levine.

5.5.1.1.3 Once the Contracting Officer approves the Dredging Plan, the designation of production days, which are days projected to have deliveries of dredged material to Montezuma, becomes part of this contract. The Contractor shall coordinate changes to the Dredging Plan that affect deliveries to Montezuma with the Montezuma operator and, if such changes are proposed, shall certify this coordination with the weekly updates of the Dredging Plan.

5.5.1.2 The Contractor shall also take into account the MHEA fill requirements covered by Section 02315 and the on-going construction and fill activity in the MHEA when developing the Dredging Plan.

5.5.1.3 The Contractor shall submit the Dredging Plan, and updates, as a CAD drawing in print and in electronic (dwg and pdf) form on a CD-ROM. The drawing shall contain project channel data and show the areas dredged, over time, and the areas to be dredged in the next week.

5.5.2 The Contractor's Dredging Plan shall demonstrate that dredging resources are being employed to expeditiously lower the channel depth to -46 feet from the entrance to the Outer Harbor until the end of the Outer Harbor by 31 January 2005 and then from the entrance to the Inner Harbor to the end of the Inner Harbor by **30 June 2005.** The Inner Harbor dredging schedule shall include the option item 0003AA as shown in the pricing schedule.

5.5.3 The Contractor shall request, in writing, the Contracting Officer's approval to begin dredging in a Reach. Except for the first request to begin, the Contractor's request to begin dredging shall include a copy the request for Reach Acceptance Survey that was submitted when the dredge to be used completed its last Reach. The Contractor shall not dredge in a Reach without written approval of the Contracting Officer.

5.6 Coast Guard Notification.

5.6.1 The Contractor shall utilize the Dredging and MHEA Fill Plans to forecast the activities in the channels and shall notify the United States Coast Guard Marine Safety Office in writing with a copy to the Contracting Officer.

5.6.2 During a weekend or other prolonged breaks of dredging activity the submerged power cables and sediment pipelines shall be secured and properly marked and the Coast Guard shall be notified of the non operation duration.

5.6.3 The Contractor shall notify the U.S. Coast Guard (S.F. Bay Traffic) via radio (Channel 14) five minutes prior to departure from the dredge site and immediately prior to arrival at the MHEA or Montezuma disposal sites.

5.7 Debris. Debris, including but not limited to man-made objects, timber, chains, anchors, flotsam, miscellaneous metal objects, tires, cables, plastics, lumber, abandoned utilities, pilings, tree branches and other foreign material removed during dredging shall not be disposed of in the Government-furnished disposal and fill areas. The Contractor shall remove any errantly placed debris found in the Government-furnished disposal and fill areas at no expense to the Government.

5.7.1 Debris Plan. The Contractor, at the dredge site, shall pass the dredged material through a grid with openings of not more than 10 inches in any dimension to prevent debris larger than 10 inches in diameter to enter the scow. The Contractor may propose another method, such as slurrying, that will similarly break up the dredged material. The Contractor shall submit his grid plan or an alternate plan for breaking up the material, including but not limited to procedures and equipment used to generate the slurry, testing procedures and test reporting procedures at least ten (10) days prior to dredging.

5.7.2 Debris Delays. The Contractor shall anticipate delays that may occur for removal and disposal of debris. The time to remove debris will not be the basis for a contract time extension.

5.7.3 Debris Separation. The Contractor shall remove all debris encountered within the dredging prism and placed it in a separate scow or other conveyance and shall disposed of all debris as specified in subparagraph 5.7.4.

5.7.4 Disposal of Debris. The Contractor shall transport all debris by truck or other conveyance off Government or Port property and shall dispose of the debris in a land

disposal site in accordance with local, State and Federal laws and regulations.

5.7.4.1 The Contractor shall obtain all necessary permits and approvals required for disposal of debris.

5.7.4.2 To measure the amount of debris removed, the Contractor shall obtain certified weight certificates furnished by a public weigh master for each truck/container of debris. The Contractor shall attach the weight certificates to all payment requests that include debris.

5.8 Overflow, Spillage and Leakage.

5.8.1 Overflow from Barges and Scows. No overflow of dredged material or water will be allowed from the receiving barges or dump scows during dredging operations.

5.8.2 Spillage and Leakage. Dredged material and water shall not be permitted to spill over or leak out of barges or dump scows while in transit to the disposal site. Barges or dump scows which exhibit an average loss in vessel draft in excess of one (1) foot between the loaded barge draft recorded at the dredging site and the predisposal draft recorded at the disposal or fill site shall be taken out of service until repaired. The Contractor shall report the average loss in vessel draft in the daily CQC Report.

5.8.3 Misplaced Material. Any dredged material that escapes, sloughs, or is lost at any time while dredging, loading, transporting, or which is deposited in an area other than that designated on the Plans shall be redredged or retrieved, and material shall be deposited where directed by the Contracting Officer, at the Contractor's expense.

5.8.4 The Contractor’s Spill Response Plan shall include monitoring of overflow, spillage and leakage.

5.9 Survey of Barge Filling Areas Located Outside of the Project Limit. If a receiving barge or dump scow is located outside of the dredging limits during dredging operations, the Contractor shall submit a plan for surveying this area. Using this survey, the Contractor shall ensure that no dredged material is spilled outside the designated dredging areas.

5.9.1 The Contractor shall provide, as attachments to the daily CQC Report, cross-sectional plots of the area where the barge/scow is loaded. The plots shall show the bottom depth before and after the barge/scow is loaded with the before and after lines clearly labeled.

5.9.2 The Contractor shall remove all material spilled outside the project limits at no cost to the Government.

5.10 Shoaling Prior to Acceptance. The Contractor shall remove shoaling that occurs within the project limits prior to acceptance of a Reach. No additional payments will be made for dredging and disposal of this shoaled material.

5.11 Shoaling After Acceptance. The Government may direct the Contractor to remove shoaling that occurs within the project limits after acceptance of a Reach and prior to the completion of the contract. The Contractor shall remove the shoaled material at the contract unit price for dredging, within the limit of available funds, if agreeable to both the Contractor and the Contracting Officer. The quantity of shoaling to be paid for

will be measured by the cubic yard by computing the volume between the surfaces shown by Government survey taken after shoaling and the final Government survey made after the shoaled material has been removed.

6. DISPOSAL OF DREDGED MATERIAL

6.1 Middle Harbor Enhancement Area (MHEA) Fill. The placement of dredged materials in the MHEA is described in Section 02315.

6.2 Montezuma Wetlands Disposal Site. Dredged material shall be transported and delivered by barge or dump scow to Montezuma for offloading and disposal as indicated on the drawings and as described herein. Offloading and disposal of the dredged material will be the responsibility of the Montezuma operator. The Contractor shall coordinate and communicate with the Montezuma operator during the offloading of the dredge material.

6.2.1. The Contractor shall deliver 4000-CY of dredged material to Montezuma every production day. The Government will deduct from the Contractor's earnings in the amount of $5000 for each production day without a 4000-CY delivery of dredged materials.

6.2.1.1 Deduction Waiver . If the quantity of material delivered for the 4-week period preceding a non-delivery day is at least 5,500CY per production day, the Government will not assess a deduction.

6.2.1.2 Downtime is an operational interruption of a production day longer than 12 consecutive hours. The Contractor is allowed three 24-hour downtime-days per month. Unused downtime-days do not carry forward to the next month.

6.2.1.3 2 The Contractor is allowed an additional seven 24-hour downtime-days for the duration of the contract. These contract-duration downtime-days shall be used after the monthly allocation (6.3.1.2) has been expended, can be used anytime during the contract and can be used singly or together or with the monthly allocation of downtime-days.

6.2.1.3 The Contractor shall report downtime-days on the daily CQC Report. The Contractor is not required to make a 4000-CY scow delivery on downtime-days. There will be no compensation for unused downtime-days.

6.2.2 The Montezuma operator, working 24 hours per day – 7 days per week, if necessary, will offload every scow delivering acceptable material to the site, but the

Government cannot require the Montezuma operator to offload more than 16,000 CY per production day. The Contractor shall deliver between 4000 CY and 16,000 CY of dredged material to Montezuma every production day. The Contractor will not be reimbursed for standby time if the Contractor attempts to deliver more than 16,000 CY in a production day and the Montezuma operator cannot accept the excess delivery. The Contractor will not be required to and shall not deliver dredged material to Montezuma on non-production days.

6.2.2.1 The Contractor shall position the scow (or barge) within reach of the suction boom equipment and shall provide tugboats to maneuver the scow during off-loading at the Montezuma site. The towing vessel, which transports the scow to the Montezuma disposal site, shall maneuver the scow to the off-loader and assist Montezuma personnel securing the scow to the off-loader. The towing vessel shall then move to the designated waiting area and shall wait until the off-loader empties the scow. After completion of the dredge material offloading, the towing vessel shall maneuver itself and provide assistance releasing the scow from the Montezuma off-loader and shall return the scow to the project site.

6.2.2.2 The Contractor is responsible for all damage done to the wharf structure or to the Montezuma off-loader (Liberty), caused by movement of scows or other vessels under the Contractor's control. The Contractor is also responsible for all damage caused to the off-loader, sediment pumps and pipeline caused by debris with a dimension greater than 10-inches. See Paragraph 5.7.1 Debris plan.

6.2.3 The Contractor shall coordinate the arrival of scows at the disposal site with the Montezuma operator to minimize delays in starting the offloading process.

6.2.3.1 The Montezuma operator is allowed three 24-hour downtime-days per month, which do not carry forward to the next month, and an additional seven 24-hour downtime-days for the duration of the contract.

6.2.3.1.1 When Montezuma completes the placement of WNC material in any combined WNC/WC cell and declares the WNC cell is momentarily filled to maximum capacity, and there is no further capacity in other cells to receive dredged materials, then Montezuma is allowed 14-calender days downtime for that WNC placement cell to settle and drain, prior to placement of WC material. Montezuma shall notify the Contracting Officer and Dredging Contractor with a written statement declaring that the WNC cell is momentarily filled to maximum capacity and that there is no further capacity in other cells to receive dredged materials. The dredging contractor will not be entitled to the 14-calendar day downtime and shall adjust his dredging plan schedule as required.

6.2.3.2 When the Montezuma operator declares a downtime-day, the Contractor is not required to and shall not deliver dredged material to Montezuma. As long as the Montezuma operator has downtime-days for the time that dredged material cannot be accepted at Montezuma, the Contractor will not be entitled to standby costs.

6.2.4 Standby Cost. For non-downtime production-days, a delay of up to 4 hours in starting the offloading process at Montezuma will not entitle the Contractor to standby costs. For delays greater than 4 hours on non-downtime production days, or on downtime

days which exceed the allowable downtime as described in Paragraph 6.2.3.1, the Contracting Officer will request a price proposal from the Contractor for standby cost.

6.2.4.1 The entitlement to standby costs ends as soon as the disposal site reports readiness to accept the disposal of dredged materials.

6.2.4.2 If the Contracting Officer directs placement of all WC material to the MHEA for the short term, then the Contracting Officer will request a price proposal for delivering material to the MHEA. The Contractor shall maintain a strict accounting of the disposition of the dredged material, i.e., how much material is delivered to where, in accordance with the approved proof of delivery method.

6.2.5 Long-term Non-Availability of the MWP Disposal Site. The Contractor shall take steps to remain productive on Montezuma downtime days, such as, delivering material to the MHEA with appropriate accounting for the dredged material, in accordance with the Contractor's paragraph 5.5.1.1.2 proof of delivery method. The Contracting Officer will request a price proposal from the Contractor for delivering all remaining WC material to the MHEA

7. DREDGING REPORTS

7.1 Dredged Sediment Report. The Contractor shall submit a Dredged Sediment Report, attached to the daily CQC report, listing the excavation and disposal or fill locations of the dredged materials. The MHEA Fill Report of Section 02315 shall be submitted for material placed in the MHEA.

7.2 Dredge Data Logging System (DDLS). The contractor shall provide a DDLS conforming to the Dredge Monitoring System Operational Requirements described in Appendix 10. The Contractor shall procure the services of a QC firm specializing in automated monitoring systems to calibrate and maintain the equipment and to perform QC verifications of the data. The DDLS and a Contractor-developed backup system shall be in place and operational prior to the start of dredging and disposal or fill operations. The Contractor shall submit the DDLS, the DDLS backup system and the qualifications of the DDLS QC firm to the Contracting Officer for approval.

7.2.1 The Contractor shall submit electronic copies of the DDLS positional data for all dredge equipment and all disposal/fill vessels utilized, on CD-ROMs with the daily CQC Report. The Contractor shall also furnish a properly licensed copy of the computer program(s), and dongle(s) if required, to playback and print all DDLS, or DDLS backup, electronic data. The Contractor shall maintain the computer program(s) for Government use until financial close out of the project. The Government will return the program(s), and dongle(s), to the Contractor when the project is financially closed out.

7.2.2 The Contractor shall electronically send dredged quantity, sediment type and GPS positional data on the dredge and disposal or fill locations for all scows (or barges) to the Government. This electronic data shall also be submitted on a CD-ROM with the daily CQC Report. The Contractor shall forward the electronic data for scows delivering material to Montezuma to the Montezuma operator.

7.3 Unsuitable Material. The Contractor shall notify the Contracting Officer if a

scow (or barge) contains dredged materials that are known to be or are suspected to be unsuitable for WC disposal or fill, or for WNC disposal, depending upon the source cell sediment classification. The Government will have the required sampling and testing performed. The Contractor shall secure the scow pending completion of the sampling and testing of the sediments contained therein and pending the Government's determination of appropriate disposition.

7.4 Dredge Material Disposal Site Log (DMDSL). The Contractor shall maintain a DMDSL using the form in Appendix 9-1. The Contractor shall email the DMDSL data to David.L.Dwinell@spd02.USACE.Army.Mil or FAX the prior week's DMDSL to the SF Engineer District, Operations Readiness Division, ATTN: David Dwinell at (415) 977-8483.

8. OVERDEPTH AND EXCESSIVE DREDGING

8.1 Overdepth. The 1-foot allowable over depth shown on the drawings, is being allowed to ensure removal of a sufficient amount of material to reach project depth and width.

8.1.1 No payment will be made for materials removed from beyond the neat line template (side slope) or the allowable over depth pay-line shown on the drawings. Over depth dredging will not be allowed in areas already at or below project depth.

8.1.2 Materials sloughing into the payment area prior to final acceptance shall be removed at no additional cost to the Government.

8.1.3 The same allowable over depth criteria applies for the WNC material except that the dredging shall be performed with an environmental bucket.

8.2 Excessive Dredging. Dredging for wetland cover (WC) and for wetland non cover (WNC) material shall not be performed below the allowable over depth. The Contractor may be subject to sanctions by Federal, State and local agencies for excessive dredging.

9. MEASUREMENT AND PAYMENT.

9.1 Mobilization and Demobilization. Payment for mobilization and demobilization will be made at the contract lump sum price for "Mobilization and Demobilization" in the schedule under which contract award is made, and in accordance with Special Clause "PAYMENT FOR MOBILIZATION AND DEMOBILIZATION". This price and payment shall be full compensation for moving all plant, labor, materials, supplies and equipment necessary to perform the dredging onto the jobsite, preparing plant and equipment ready for work, and removing same from the jobsite upon completion of the contract work.

9.2 Dredging

9.2.1 Final Measurement for Payment. Final measurement for payment of the total amount of material dredged will be made based on the cubic yards of material in-place, by computing the volume between the bottom surface shown by soundings from the Government pre-dredge survey taken before dredging and the bottom surface shown by soundings from the final Government post-dredge survey compared with the neat line

template, using a Triangulated Irregular Network (TIN) computation program. This quantity shall include excavation performed within the allowable over depth limits and exclude excessive dredging as specified under paragraph "OVER DEPTH AND EXCESSIVE DREDGING".

9.2.1.1 The Contractor shall certify the Government pre-dredge and post-dredge surveys in accordance with paragraph 3.2.3 of Section 01330.

9.2.1.2 The Contractor shall request a Government Acceptance Survey (post-dredge) in accordance with paragraph 3.2.2.1 of Section 01330 when a Reach identified in Table 02480-1 is completed and ready for a Government acceptance inspection. Prior to acceptance all shoaling occurring in the Reach shall be the responsibility of the Contractor in accordance with paragraph 5.10. Shoaling occurring after acceptance of the Reach shall be removed in accordance with terms specified in paragraph 5.11.

9.2.1.3 If the Government finds the Reach to be unacceptable, the Contractor shall resume dredging within seven (7) calendar days and shall continue dredging until the work is completed. At that point, the Contractor shall request another Government Acceptance Survey, which will be performed in accordance with paragraph 3.2.2.4 of Section 01330.

9.2.1.4 Acceptance of the whole or a part of the work and the deductions or corrections of deductions made thereon after having once been made will not be reopened, except on evidence of collusion, fraud or obvious error.

9.2.3 Monthly partial payments will be based on approximate quantities determined by hydrographic surveys as specified in paragraphs 3.1.2 and 3.4.1 of Section 01330. The Contractor shall present the quantity calculations and supporting survey documentation to the Contracting Officer at the Section 01320 Periodic Progress Meetings in order to assess Contractor's progress for the Periodic Project Schedule Update, which is necessary for verifying the Contractor's progress. The Contractor shall incorporate the assessed progress into the Project Schedule and into the Section 01312 RMS in order to generate a payment request report using RMS-QC**.**

9.2.4 Payment for dredging will be made at the applicable contract unit price.

9.3 Debris. Payment will be made for the debris tonnage verified by the weight certificates at the applicable unit price for debris.

9.4 Supporting Documentation. The Government will not begin processing a progress (or final) payment request until all supporting documentation has been received, reviewed and found to be in good order.

9.4.1 Survey Documentation. Progress Payment Survey Documentation is described in paragraph 3.3.3 and Final Payment Survey Documentation is described in paragraph 3.3.4 of Section 01330.

9.4.2 Planning Documentation. The Dredging (02480) and MHEA Fill (02315) Plans and Project Schedule (01320) shall be up-to-date with CQC Report data submitted and incorporated. The Project Schedule shall be incorporated into RMS.

9.5 The Contractor shall obtain written permission from the Contracting Officer

before removing construction plant, equipment and materials from the project site. Structures and facilities prepared or erected for the prosecution of the contract work shall be maintained and shall not be dismantled and removed prior to the completion and acceptance of the entire work without the written permission of the Contracting Officer.

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SAFETY IS A TEAM EFFORT